## INTERNATIONALSEARCHREPORT

International application No.
PCT/JP2004/005236

A. CLASSIFICATIONOF SUBJECT MATTER				
Int.Cl7 H	02M 3/07, G05F 1/56			
According to	International Patent Classification (IPC) or to both nati	onal classification and IPC		
	OS SEARCHED	17 17 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	cumentation searched (classification system followed by cl	assification symbols)		
Int.Cl7 H	02M 3/00-3/44, G05F 1/00-1/70			
Japanese Applicati	on searched other than minimum documentation to the ex Utility Model Gazette 1922-1996, Japanese ons 1971-2004, Japanese Registered Utilit g the Utility Model 1996-2004	Publication of Unexamined Util	e fields searched Lity Model apanese Gazette	
Electronic da	ta base consulted during the international search (name of	data base and, where practicable, search ter	ms used)	
C. DOCUM	MENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where app	propriate, of the relevant passages	Relevant to claim No.	
A	JP 4-127307 A (FUJITSU LIMIT LIMITED)	·	1-5	
	28.04.1992, line 19, column column 5, Fig 7(Family:none			
<b>A</b>	JP 11-8969 A(NEC IC MI-COM 12.01.1999, line 18, column column 6, Fig 1(Family:none	5 to line 24,	1-5	
A	JP 5-111241 A(FUJITSU LIMIT LIMITED) 30.04.1993, line 29, column	·	1-5	
•	column 3, Fig 1(Family:none			
		•	٠	
		•		
Furth	er documents are listed in the continuation of Box C.	See patent family annex.		
"A" docum	l categories of cited documents: nent defining the general state of the art which is not cred to be of particular relevance	"T" later document published after the priority date and not in conflict with understand the principle or theory	the application but cited to	
"B" earlier	application or patent but published on or after the inter-	"X" document of particular relevance; the considered novel or cannot be inventive step when the document	e claimed invention cannot considered to involve an	
is cited specia	ent which may throw doubts on priority claim(s) or which to establish the publication date of another citation or other I reason (as specified)	"Y" document of particular relevance; the be considered to involve an inventive	ne claimed invention cannot e step when the document is	
means	ent published prior to the international filing date but later	combined with one or more oth combination being obvious to a per  "&" document member of the same pate	son skilled in the art	
	he priority date claimed actual completion of the international search	Date of mailing of the international sear	ch report	
Duit of the	07.07.2004		7. 2004	
Name and mailing address of the ISA/ID			3V 2917	
	Japan Patent Office	SAKURADA Masaki	30 2311	
242 70	-	Tolenhone No. +81-3-3581-1101	Ext. 3356	

## INTERNATIONALSEARCHREPORT

International application No. PCT/JP2004/005236

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.  1-5
PA	JP 2003-333831 A(RICOH COMPANY, LTD.) 21.11.2003, line 20, column 5 to line 22, column 11, Fig 1(Family:none)	
PA	JP 2003-186554 A(RICOH COMPANY, LTD.) 04.07.2003, whole document & US 2003/0128489 A1 & CN 1425962 A	
	·	
		·
	·	